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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,221	07/01/2005	Akihiro Watabe	071971-0281	4946

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MCDERMOTT WILL & EMERY LLP
600 13TH STREET, N.W.
WASHINGTON, DC 20005-3096

EXAMINER	
BOKHARI, SYED M	

ART UNIT	PAPER NUMBER
2416	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/541,221	WATABE ET AL.	
	Examiner	Art Unit	
	SYED BOKHARI	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 December 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6,11 and 14-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4, 6, 11 and 14-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on December 4th, 2008 has been entered. Claims 1-2, 11 and 14 have been amended. Claims 5 and 7 have been canceled. Claims 1-4, 6, 11 and 14-16 are still pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-4, 6, 11 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tahara et al. (US 6,671,323 B1) in view of Sakazawa et al. (US 6,075,900) and further in view of Chen et al. (US 5,241,383)

Tahara et al. disclose an encoding system for encoding input video data and a decoding system for decoding encoded streams with the following features: regarding claim 1, a code translation method comprising the step of receiving an input code stored in a hierarchical data structure, the input code including a parameter related to the amount of data encoded in the input code (Fig. 26, a schematic diagram showing the data of a sequence layer, GOP layer, and picture layer, see "data structure of an MPEG encoded stream" recited in column 11 lines 51-54, column 11 lines 60-62 and column 14 lines 37-39), user data at a first level of the hierarchical data structure and main data at a second level of the hierarchical data structure (Fig. 26, a schematic diagram showing the data of a sequence layer, GOP layer, and picture layer, see "the function is used to define extension data and user data for the GOP layer of the MPEG encoded bit stream" recited in column 12 lines 54-63), generating an output code stored in the hierarchical data structure by modifying the input code (Fig. 31, a block diagram showing the configuration of an MPEG decoder, see "the video data output from the

multiplexing circuit 417 has exactly the same ancillary data" recited in column 24 lines 9-14), wherein the main data included in the output code is identical to the main data included in the input code (Fig. 31, a block diagram showing the configuration of an MPEG decoder, see "will not cause the ancillary data added to the input video data to be lost" recited in column 24 lines 15-20); regarding claim 2, wherein the hierarchical data structure conforms with the ISO 13818 standard (Fig. 1, a block diagram showing the configuration of a system that comprises a conventional MPEG encoder and MPE decoder, see "the MPEG technology is standardized as ISO/IEC 13818" recited in column 1 lines 14-18) and the parameter related to the amount of data encoded by the input code is one of a bit rate value, a VBV (Video Buffering Verifier) buffer size value, and a VBV delay value; and the main data comprises compressed video data (Fig. 26, a schematic diagram showing the data of a sequence layer, GOP layer, and picture layer, see "wherein the extension_and_user_data(1) function is used to describe only the data elements defined by user_data including VBV delay and VBV buffer)" recited in column 18 lines 25-45); regarding claim 3, wherein the first level of the hierarchical data structure is the Group of Pictures (GOP) layer; and the third level of the hierarchical data structure is the picture layer (Fig. 26, a schematic diagram showing the data of a sequence layer, GOP layer, and picture layer, see "wherein discloses in the different levels corresponding to the GOP layers and the picture layers" recited in column 5 lines 29-30, column 12 lines 55-60 and column 13 lines 1-7); regarding claim 4, wherein the first level of the hierarchical data structure is the picture layer; and the third level of the hierarchical data structure is the Group of Pictures (GOP) layer. (Fig. 26, a schematic

diagram showing the data of a sequence layer, GOP layer, and picture layer, see "wherein discloses in the different levels corresponding to the GOP layers and the picture layers" recited in column 5 lines 29-30, column 12 lines 55-60 and column 13 lines 1-7) and regarding claim 6, further comprising the step of generating additional information for distinguishing the user data included in the input code from the other main data, wherein generation of the output code is advanced according to the additional information (Fig. 26, a schematic diagram showing the data of a sequence layer, GOP layer, and picture layer, see "the extension_and_ user_data(0) function is used to define extension data and user data for the sequence layer of an MPEG bit stream corresponds to generating additional information for distinguishing the user data included in the input code from the other main data" recited in column 12 lines 31-33); regarding claim 11, a code translation device comprising, a data analyzing section adapted to identify in an input code stored in a hierarchical data structure a parameter related to the amount of data encoded in the input code, user data and main data at a second level of the hierarchical data structure (Fig. 26, a schematic diagram showing the data of a sequence layer, GOP layer, and picture layer, see "wherein discloses in the different levels corresponding to the GOP layers and the picture layers" recited in column 7 lines 36-43), multiplexing section which produces an output code in which the input code is modified (Fig. 31, a block diagram showing the configuration of an MPEG decoder, see "the video data output from the multiplexing circuit 417 has exactly the same ancillary data" recited in column 24 lines 9-14), and including in the output code the main data included in the input code (Fig. 31, a block diagram showing the

configuration of an MPEG decoder, see "will not cause the ancillary data added to the input video data to be lost" recited in column 24 lines 15-20); regarding claim 14, wherein the hierarchical data structure conforms with the ISO 13818 standard (Fig. 1, a block diagram showing the configuration of a system that comprises a conventional MPEG encoder and MPE decoder, see "the MPEG technology is standardized as ISO/IEC 13818" recited in column 1 lines 14-18), the parameter related to the amount of data encoded by the input code is one of a bit rate value, a VBV (Video Buffering Verifier) buffer size value, and a VBV delay value; and the main data comprises compressed video data (Fig. 26, a schematic diagram showing the data of a sequence layer, GOP layer, and picture layer, see "wherein the extension_and_user_data(1) function is used to describe only the data elements defined by user_data including VBV delay and VBV buffer)" recited in column 18 lines 25-45); regarding claim 15, wherein the first level of the hierarchical data structure is the Group of Pictures (GOP) layer; and the third level of the hierarchical data structure is the picture layer (Fig. 26, a schematic diagram showing the data of a sequence layer, GOP layer, and picture layer, see "wherein discloses in the different levels corresponding to the GOP layers and the picture layers" recited in column 5 lines 29-30, column 12 lines 55-60 and column 13 lines 1-7) and regarding claim 16, wherein the first level of the hierarchical data structure is the picture layer; and the third level of the hierarchical data structure is the Group of Pictures (GOP) layer. (Fig. 26, a schematic diagram showing the data of a sequence layer, GOP layer, and picture layer, see "wherein discloses in the different

levels corresponding to the GOP layers and the picture layers" recited in column 5 lines 29-30, column 12 lines 55-60 and column 13 lines 1-7).

Tahara et al. do not disclose the following features: regarding claim 1, moving the user data to a third level of the hierarchical data structure; regarding claim 11, by moving the user data to a third level of the hierarchical data structure.

Sakazawa et al. disclose a method and apparatus for coded moving picture data hierarchy formation with the following features: regarding claim 1, moving the user data to a third level of the hierarchical data structure (Fig. 10, a block diagram showing the third embodiment of the invention, see "low frequency components of P picture data are assigned to a third hierarchy" recited in column 2 lines 10-34); regarding claim 11, by moving the user data to a third level of the hierarchical data structure (Fig. 10, a block diagram showing the third embodiment of the invention, see "low frequency components of P picture data are assigned to a third hierarchy" recited in column 2 lines 10-34).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Tahara et al. by using the features, as taught by Sakazawa et al., in order to provide moving the user data to a third level of the hierarchical data structure. The motivation of using these functions is to enhance the system in a cost effective manner.

Tahara et al. and Sakazawa et al. do not disclose the following features: regarding claim 1, changing the parameters to reflect the change in code size effected by the moving; regarding claim 11, changing the parameters to reflect the change in code size effected by the moving.

Chen et al. disclose a communication system for coding video signals using motion compensated prediction and interpolation and self governing rate buffer control strategy with the following features: regarding claim 1, changing the parameters to reflect the change in code size effected by the moving (Fig. 2, schematically illustrates a coding circuit and rate buffer for carrying out the inventive coding algorithm, see "the

quantization parameters are changed on a global SGOP level to avoid changes in decoded image quality" recited in column 12 lines 3-22); regarding claim 11, changing the parameters to reflect the change in code size effected by the moving (Fig. 2, schematically illustrates a coding circuit and rate buffer for carrying out the inventive coding algorithm, see "the quantization parameters are changed on a global SGOP level to avoid changes in decoded image quality" recited in column 12 lines 3-22).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Tahara et al. with Sakazawa et al. by using the features, as taught by Chen et al., in order to provide changing the parameters to reflect the change in code size effected by the moving. The motivation of using these functions is to enhance the system in a cost effective manner.

Response to Arguments

6. Applicant's arguments with respect to claims 1-4, 6, 11 and 14-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SYED BOKHARI whose telephone number is (571)270-3115. The examiner can normally be reached on Monday through Friday 8:00-17:00 Hrs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Syed Bokhari/
Examiner, Art Unit 2416
2/19/2009

/Kwang B. Yao/

Supervisory Patent Examiner, Art Unit 2416